

CLAIMS

## WHAT IS CLAIMED IS:

- 5           1.     A process comprising contacting PO3G having color with adsorbent and separating the PO3G and adsorbent, wherein the PO3G, after contact with the adsorbent, has a molecular weight of about 250 to about 5000 and a APHA color of less than about 50.
- 10           2.     The process of claim 1, wherein the color of the PO3G, after contact with the adsorbent, has a APHA color of less than about 40.
3.     The process of claim 1, wherein the color of the PO3G, after contact with the adsorbent, has a APHA color of less than 30.
- 15           4.     The process of claim 1, wherein the color of the PO3G, after contact with the adsorbent, has a APHA color of less than about 20.
5.     The process of claim 1, wherein the PO3G has a molecular weight of about 500 to about 4000.
- 20           6.     The process of claim 1, wherein the PO3G has a molecular weight of about 1000 to about 3000.
7.     The process of claim 1, wherein the adsorbent comprises at least one of activated carbon, alumina, silica, diatomaceous earth, montmorillonite clays, Fuller's earth, kaolin minerals and derivatives thereof.
- 25           8.     The process of claim 1, wherein the adsorbent comprises activated carbon.
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9. The process of claim 8, wherein the PO3G is contacted with about 0.1 to about 5 weight % of the activated carbon based on the weight of the PO3G.

5 10. The process of claim 8, wherein the PO3G is contacted with about 0.25 to about 3 weight % of the activated carbon based on the weight of the PO3G.

11. The process of claim 9, wherein the contacting is conducted  
10 at a temperature of about 10° to about 150°C.

12. The process of claim 11, wherein the contacting is conducted at a temperature of about 25° to about 100°C.

13. The process of claim 11, wherein the contacting is conducted  
15 for a period of about 5 to about 60 minutes.

14. The process of claim 13, wherein the contacting is conducted  
for a period of about 10 to about 30 minutes.

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15. The process of claim 1, wherein the PO3G has a APHA color, before contact with adsorbent, of at least 50.

16. The process of claim 1, wherein the PO3G has a APHA  
25 color, before contact with adsorbent, of about 70 to about 300.

17. The process of claim 16, wherein the APHA color, before contact with adsorbent, is about 85 to about 250.

18. The process of claim 16, wherein the APHA color, before  
30 contact with adsorbent, is about 100 to about 200.

19. The process of claim 1, wherein the APHA color is reduced by at least about 50%.

20. The process of claim 1, wherein the APHA color is reduced  
5 by at least about 60%.

21. The process of claim 1, wherein the APHA color is reduced by at least about 70%.

10 22. A process comprising:  
(a) providing reactant comprising 1,3-propanediol and polycondensation catalyst;  
(b) polycondensing the reactant to PO3G having color;  
(c) contacting the PO3G with adsorbent; and  
15 (d) separating the PO3G and adsorbent,  
wherein the color of the PO3G, after contact with the adsorbent, has a APHA color of less than about 50.

23. The process of claim 22, wherein the adsorbent comprises  
20 activated carbon, the PO3G is contacted with about 0.1 to about 5 weight % of the activated carbon based on the weight of the PO3G, and the contacting is conducted at a temperature of about 10° to about 150°C.

24. A product comprising: (i) PO3G having color and (ii)  
25 adsorbent, wherein the PO3G has a APHA color of less than about 50.

25. The product of claim 24, wherein the PO3G has a APHA color of less than about 40.

30 26. The product of claim 24, wherein the color of the PO3G wherein the PO3G has a APHA color of less than 30.

27. The product of claim 24, wherein the color of the PO3G has a APHA color of less than about 20.

28. The product of claim 24, wherein the adsorbent is at least  
5 one of activated carbon, alumina, silica, diatomaceous earth, montmorillonite clays, Fuller's earth, kaolin minerals and derivatives thereof.

29. The product of claim 24, wherein the adsorbent is activated  
10 carbon.

30. The product of claim 24, containing about 0.25% to about 5 % adsorbent.

15 31. The product of claim 24, containing about 1% to about 3% activated carbon.